## Pittsburg County, Oklahoma COUNTY PURCHASING OFFICE

Pittsburg County Court House McAlester, Oklahoma Phone: (918) 423-4934

## **INVITATION TO BID**

					ED <b>20-Feb-18</b>
BID NUMBER			BID CLOSING DATE AND HOUR	PAGE 1 OF	
			March 16, 2018 @ 5:00PM		
Item	Quantity	Unit of issue	DESCRIPTION	Unit Price	Total
			Board of County Commissioners wishes to advertise for the following:		
			One(1) Complete Asphalt Plant Lease Purchase with Financing Included		
			See Specifications Attached		
			PLEASE MARK CLEARLY ON FRONT OF SHIPPING ENVELOPE BID & BID NUMBER		
			8		
				2	

#### **TERMS AND CONDITIONS**

- Sealed bids will be opened in the Commissioner's Conference Room, Pittsburg County Courthouse, McAlester, Oklahoma, at the time and date shown on the invitation to bid form.
- 2. Late bids will not be considered. Bids must be received in sealed envelopes (one to an envelope) with bid number and closing date written on the outside of the envelope.
- 3. Unit prices will be guaranteed correct by the bidder.
- 4. Firm prices will be F.O.B. destination.
- 5. Purchases by Pittsburg County, Oklahoma, are not subject to state or federal taxes.
- 6. This bid is submitted as a legal offer and any bid when accepted by the County constitutes a firm contract.
- 7. Oklahoma laws require each bidder submitting a bid to a county for goods or services to furnish a notarized sworn statement of non-collusion. A form is supplied below.
- 8. Bids will be firm until delivered.

(DATE)

AFFIDAVIT: I, the undersigned, of lawful age, being first duly sworn on oath say that he (she) is the agent authorized by the bidder to submit the above bid. Affiant further states that the bidder has not been a party to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding; or with any state official or employee as to quantity; quality or price in the prospective contract or any other terms of said prospective contract; or in any discussions between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract; that the bidder/contractor has not paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma (or other entity) any money or other thing of value, either directly or indirectly in the procuring of the award of a contract pursuant to this bid.

ribed and sworn before this	day (seal)		
	Firm:		
My commission expires	Signed by:	Title:	
	(MANUAL SIGNATURE OF UNDERSIGNED)		
	Address:	Phone:	
NOTARY PUBLIC (CLERK OR JUDGE)			
	City:	State	
		Zin	

# RESOLUTION 18-178 To Advertise

The Board of County Commissioners, Pittsburg County, met in regular session on Tuesday, February 20, 2018.

WHEREAS, the Board of County Commissioners wishes to advertise for the following:

One (1) Complete Asphalt Plant Lease Purchase with Financing Included

A bid package containing complete specifications and an "Invitation to Bid" are available at the Pittsburg County Clerk's Office, 115 E. Carl Albert Parkway, Room 103, McAlester, Oklahoma 74501 or online at pittsburg.okcounties.org.

THEREFORE, each competitive bid submitted to the County must be accompanied with an affidavit for filing with the competitive bid form, as required by 61 O.S. \$ 138.

Sealed bids will be received and filed with the Pittsburg County Clerk until Friday, March 16, 2018 at 5:00 p.m. All bids received after 5:00 p.m. on March 16, 2018 will NOT BE OPENED. Bids will be opened on Monday, March 19, 2018 at 10:00 a.m. in the Board of County Commissioners Conference Room, 115 E. Carl Albert Parkway, McAlester, Oklahoma. Bid will be awarded to the lowest or best bidder. The Board of County Commissioners, Pittsburg County, reserves the right to reject any and all bids at re-advertise.

BOARD OF COUNTY COMMISSIONERS PITTSBURG COUNTY, OKLAHOMA

ATTEST:

OBOBOTO OF TRAINER OF

CHAIRMAN

MEMBER

MEMBER

COUNTY CLERK(

Cheli Ross

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## BID SPECIFICATIONS FOR ONE (1) COMPLETE ASPHALT PLANT LEASE PURCHASE WITH FINANCING INCLUDED

160 TPH production rate is based on the following conditions:

275°F fan gas temperature 300°F material temperature 70° ambient temperature 650' above sea level 50% excess air 10% casing losses 5% leakage air 5% moisture removal 5% liquid asphalt 20% minus #8 materials

## **ASPHALT PLANT**

#### DRYER

- 6' diameter x 32' long rotary drum. The shell shall be manufactured from A36 steel.
- Two (2) dryer tires construction from 1045 alloy steel, quenched and tempered to a 200 Brinnel, forged one piece and seamless shall be factory mounted. Tire support pads shall be placed between the drum tire and drum shell.
- Four (4) adjustable trunnions with spherical roller bearings. Trunnions shall be hardened to a 50-60 rockwell and driven by shaft mounted gear reducers & 15 hp x 1800 rpm motors.
- Two (2) oversized guide rollers ensure total tire/trunnion surface contact.
- An alternating flight design shall provide for a high efficiency material veil, reducing operating costs. Flights shall be staggered for maximum heat transfer.
- An exhaust breeching located at the discharge end of the drum shall provide for duct transition and velocity reduction. A manhole access shall be provided with quick release clamps. High temperature drum seals shall be stud welded externally onto the back of the exhaust breeching minimizing leakage air.
- Main frame shall be constructed from heavy duty I-beams with support legs to grade.

## INLET (SLINGER) FEED CONVEYOR

- Fast feed slinger conveyor with 5hp x 1800 rpm motor.
- Shaft mounted gear reducer.
- Browning sheaves and belts with expanded metal belt guard.
- Cema "B" or equivalent, troughing idlers.
- Cema "B" or equivalent, flat idlers for returns.
- 24" multi-ply conveyor belting.
- Lagged head pulley.
- Self-cleaning wing pulley with adjustable take-ups.
- Heavy-duty C-Channel construction.

## BURNER EQUIPMENT

- 49.3 million BTU/hr. burner unit.
- Combination burner with wide range of turndown.
- Flow meter included.
- Stainless steel ignition cone.
- Adjustable flame shaping capabilities.
- Dual scanner ports.
- 36osi high-pressure atomizing blower with 50 hp x 3600 rpm motor.

## FUEL OIL PUMPING SYSTEM

- 9 gpm fuel oil pump assembly with 1 hp x 3600 rpm motor.
- Duplex filters with independent ball valve shutoffs.
- Ful-Flo, or equivalent, pressure regulator with pressure gauges.
- Factory piped and mounted on a metal base.

#### **DUAL**

## FUEL BURNER

• Natural gas & #2 fuel oil.

## ASPHALT PUMPING SYSTEM

- Viking, or equivalent, 60 gpm dual, mass flow pump system.
- 5 HP AC 1200 RPM motor with frequency drive.
- Browning, or equivalent, sheaves and belts.
- Hinge down belt guard over drives.
- Three-way jacketed valve mounted to metering pump.
- Pneumatically operated three-way valve with cylinder, valve, and all electrical components.
- Circuit limit switch with status light, displaying liquid asphalt pumping direction.
- Adjustable motor mount, for belt tensioning.
- Temperature compensation with probe, factory mounted.
- 60 pulse per revolution digital tachometer feedback, factory mounted in a 10" x 8" Nema 4, or equivalent enclosure.
- Skid mounted onto a rugged steel base. Factory assembled and piped with stainless steel hot-oil jumpers.
- All high voltage wiring will be terminated to separate enclosure mounted to the pump skid.

## DRUM-MIXER PORTABILITY

- The portability package shall include dual 11 x 22.5 tires and rims mounted on tri-axles, air brakes, stop and turn signals, kingpin hitch and glad hand.
- The spring suspension shall provide a smooth ride to protect equipment on the road.
- Adjustable crank down legs with pads shall be provided for quick and easy setting.
- Landing jacks shall be provided for easy tractor hookup and disconnect.

## CONTROL SYSTEM

## CONTROL ROOM

- 8' 6" wide x 20' 0" long operators control center.
- All steel welded frame construction shall include wall studs, floor and ceiling joists. All steel work shall be prime coated; All exposed steel shall be painted.
- Sidewall construction shall be a combination of steel tubing and 11 gauge sheet metal with sprayed on insulation and 7/16" interior wood paneling.
- 36" by 80" insulated heavy duty 24-gauge steel clad entrance door with keyed lockset, chain style door stop and double pane insulating window.
- Suspended 24 inch square textured Armstrong, or equivalent, acoustical ceiling panels with 4 tube surface mounted fluorescent light fixtures.
- Ceiling and Sidewalls shall be insulated with high R value spray on insulation, installed to minimize heat loss/gain and sound transmission. Insulation shall provide 100% backing to both the exterior and interior panels.
- 7/16" thick Georgia Pacific, or equivalent, woodgrain interior paneling.
- Easy maintenance 12" square vinyl composition tile floor over 3/4" T&G, or equivalent, plywood subfloor.
- Virtually 360° visibility with over 135 square feet of tinted, ¼" plate safety glass. Windows shall be angled to minimize dirt or moisture accumulation and to minimize noise reverberation. Window slop is typically 3" from top to bottom.
- Air conditioner/heater with 3 ton cooling capacity and 10 kW heating capacity. A wall mounted thermostat shall be in the operator's area.

## MOTOR CONTROL CENTERS (MCCs)

- MCC'S shall be used to house across-the-line starters with Electronic Overload Relays Soft starters and variable speed drives.
- The MCC's mount shall be inside the control house separate from the operator's controls.
- UL 508A Listed, or equivalent; Type 12 enclosure painted to match the plant, over an ANSI 61, or equivalent, gray polyester powder base paint, outside and white, polyester powder paint inside.
- All breakers, motor starters, and frequency drives, and other components shall be mounted inside the MCC and pre-wired at the factory. (Items for bin feeders and tank control are housed in separate MCC's)
- Steel panels shall be 12 gauge, finished with a conductive, corrosion-resistant coating.
- IEC-style components shall allow for a more compact footprint design that maximizes enclosure use, reducing your MCC footprint.
- MCC's shall have a main disconnect breaker from
- Standard 3-phase, 3-wire, ungrounded Delta, or equivalent, connection, rated 600V or less, and 50 or 60 Hz.
- Quick Connect power connectors shall be provided for all motors under 100HP.
- 3-point latch mechanism operated by oil-tight key-lock handle
- Enclosures shall have gasketed, overlapping doors to keep the elements at bay.

## PLANT CONTROL SYSTEM

- Operators shall control the console.
- Status indicating lights.
- Motor control centers shall include motor starters and circuit breaker protection.

### BURNER CONTROL SYSTEM

- Automatic microprocessor temperature controllers by Honeywell, or equivalent.
- High stack temperature alarm controller.
- Motor status-indicating lights.
- Flame supervision with ultraviolet flame sensors.
- Manual control backup separate from automatic controls for burner operation.
- Exhaust gas damper control.
- Multi-fuel selector switch for dual fuel applications.

## AUTOMATIC DAMPER CONTROL

- Photohelic differential pressure switch/indicator for automatic exhaust damper control.
- Manual override enables the operator to open or close the damper without the use of automatics.
- Controls the amount of excess air.
- Variable set points of adjustment.

## WINDOWS® BASED MIX PROCESS COMPUTER

- A consumer grade PC with Windows® operating system to create a user friendly operating environment.
- Virgin aggregate scale and totalizer.
- User selected volumetric scale backups.
- A weigh bridge assembly with rugged two piece fall through design and 150kg loadcell shall be included.
- Automatic zero weight belt load tracking.
- Computer prompted calibration procedure.

## HOT LIQUID ASPHALT BLENDING

- Asphalt pump rate automatically controlled, timed and interlocked to the aggregate scale rate.
- Liquid asphalt weight temperature compensation.
- Liquid asphalt totalizer.

## AGGREGATE PROPORTIONING

- Volumetric control for feeders. Capable of up to 13 different inputs.
- Computer assisted feeder calibration.

## **DISPLAYS**

- Displays meaningful plant information in both text and graphics based formats.
- Operators shall be able navigate through various displays and procedures using the mouse or the PC's keyboard.
- Virgin aggregate rate TPH.
- Asphalt rate TPH.
- Mix discharge temperature. Liquid asphalt temperature.
- Operator-installed aggregate moisture content for each aggregate.
- Calibration menu.
- Unlimited storage of mix formulas.
- Full feature recordation.
- Direct printout of all screens.
- Individual totals of each aggregate used.
- Calibration screens.

## SILO LOADOUT COMPUTER SYSTEM

- Compatible with one or more silos for truck scales, weigh batchers, or reverse weighing systems.
- Similar ticket and display formats to simplify operations.
- Default data entry automatically enters all data last used by selected truck.
- Assisted copy feature copies previous tick data to current truck entry with single keystroke.
- Pop up customer memo file.
- Weigh-in/weigh-out capability to capture gross weights/tare weights and store/print ticket on demand.
- Cash sale tickets printed.
- Correction tickets stored or printed.
- Copies of previous tickets printed.
- Individual free fall value compensation.
- English or Metric units.
- Silo inventory. Reverse weighing systems, silo weight is measured in bar graph and numerical form.
- Full Featured ticket printing using up to 5 part preprinted or plain paper forms.
- Printed summary reports include material/mix, truck, customer and job reports.
- Truck file retains latest truck loading parameters.
- Ticket file retains entire ticket record, view or print.
- Job files; unlimited ten digit alphanumeric customer numbers, 4 lines of description, 35 characters per line.
- Customer files; unlimited ten digit alphanumeric customer numbers, 4 lines of description, 35 characters per line.
- Material/Mix file; 100-material/mix description of 20 characters each including a separate price for each material.

#### HARDWARE

- Industrial grade PC with hard disk drive for permanent data storage.
- Programmable Logic Controller (PLC) plant interface.
- IBM, or equivalent, compatible VGA, LCD flat panel color display monitor.
- IBM, or equivalent, compatible printer.
- Digitizer, stand-alone NTEP certified commercial grade scale weight indicator.
- Line stabilization transformer.
- Manual override for silo-batcher controls.

## **BAGHOUSE FILTER**

## STATIONARY BAGHOUSE

#### DESIGN

- 34,000 ACFM air volume.
- +/- 30" wg pressure rating.
- 250-350°F air temperature.
- 15-20" wg operating vacuum.
- 260ft/min can velocity nominal.
- 6,590 ft<sup>2</sup> filter area.
- 5.15:1 air-to-cloth ratio.
- 36scfm @ 80-100psig w/15 sec off time, normal.
- 90scfm @ 80-100psig w/6 sec on time, maximum.

#### CONSTRUCTION

- All welded sub-assemblies.
- Internal grid just above the hopper to act as bag catch.
- Flanged air inlet & outlet.
- Flanged hopper discharge.
- Hopper access port.
- Lift off roof doors & hopper access plate w/silicon sponge rubber gaskets rated for 350°F.
- Perimeter roof rails & caged ladder to the roof.
- Girth channel for continuous support on the four (4) sides of dust collector welded at the hopper bin line.
- Schedule 40 internal air piping.
- Compressed air header assembly mounted at the mid-rail.
- Die-cast aluminum diaphragm valves.
- Brass solenoid valves, 115/1/60
- Solid state sequential timer, 115/1/60.
- NEMA-4 enclosures for the solenoid valves, plus the solenoid valves are pre-connected for their respective diaphragm valves using "polyflo" tubing.
- NEMA-4 enclosure for the time & photohelic mounted on plant.
- Differential pressure gauge/switch, Dwyer photohelic type 0-10"wg.
- Air header pressure gauge, dial indicating, 0-220psig.
- Presstite gasket at the tubesheet flange.
- Carbon steel galvanized cages, 11 ga., 10 vertical wires, 8" horizontal ring spacing, flanged top w/integral venture, solid pan bottom shipped loose for field installation.
- Full set (420 bags, 6" diameter x 10' long) of 100% Dupont Nomex, or equivalent, felt filter bags shipped loose for field installation.
- Top bag removal through lift-off roof panels.
- Exterior carbon steel surfaces prime painted w/lead free, rust inhibitive alkyd primer followed w/enamel finish coat.

## **EQUIPMENT**

- Inlet breeching w/oversized pre-cleaner air entry.
- Ductwork sections to include dryer-to-baghouse, baghouse-to-exhaust fan, plus E.P.A. approved test ports in exhaust stack.
- High temperature, air purged, rotary airlock for fines & 3/4hp x 1800rpm motor.
- Pneumatically conveyed fines return system & 15 hp x 1800rpm motor, all skid mounted & includes ceramic elbows.
- 34,000acfm x 15"wg BC Series exhaust fan & 125hp x 1800rpm motor.
- Opposed blade type airflow damper with automatic control.
- 105 acfm air compressor & 30hp x 1800rpm motor includes pressure regulator & water filter

## MODULAR COLD FEED BINS

#### **COLD FEED BINS**

- The top opening of each bin is 12' wide x 9' deep and has a capacity of 20 tons based on a material density of 110 lbs/ft.<sup>3</sup>.
- The top lip on each bin is reinforced with heavy-duty angle iron.
- Bin walls are fabricated with 1/4" thick steel plate with heavy angle stiffeners for rigid support.
- The steep sloped sidewalls ensure free flow of materials to a self-relieving discharge opening.
- A multi-position radial type discharge gate with positive lock is provided with each bin.
- Heavy ½" rubber skirt boards keep material spillage to a minimum.
- The belt feeders are 24" wide x 7'6" long with 4" diameter flat rollers on 5" centers for maximum support.
- Each belt feeder has a lagged head pulley and self-cleaning, adjustable tail pulley.
- Feeder drives use a 3-hp ac x 1200-rpm motor with variable drive.
- The 24" wide collecting conveyor is extended to a sufficient height to feed the scalping screen.
- The collecting conveyor has a lagged head pulley and self-cleaning, adjustable tail pulley and is driven by a 7-1/2 hp x 1800-rpm motor.
- The collecting conveyor has 4" diameter troughing rollers on 4' centers and 4" diameter flat return rollers on 10' centers.
- A spring tensioned belt cleaner is mounted to the head pulley of the collecting conveyor.
- All drives have open mesh belt guards for safety and ease of visual inspection.
- The bins are integrated with heavy duty "I"-beam construction and support legs to grade are provided.
- The cold feed unit is factory wired from the included power panel, which is mounted to the frame. This weatherproof enclosure houses the necessary breakers and frequency drives.

## ONE (1) ELECRIC BIN VIBRATOR

• The bin vibrator is provided to enhance the flow of material when using wet or dense aggregates.

#### FLOW DETECTORS ON EACH BIN

• The detectors are mounted in the discharge opening of each bin. Through the use of visual and audible alarms, they alert the operator to an interruption of material flow.

#### TACH FEEDBACK ON EACH BIN

• Mounted to the tail pulley of each bin feeder, the tachometer transmits belt speed to the blending computer for accurate proportioning control.

## WEIGH CONVEYOR

#### WEIGH CONVEYOR

- The 24" wide x 30' long channel frame weigh conveyor, weighs and transfers material from the scalping screen to the drum fast feed conveyor.
- The receiving chute shall have a heavy ½" rubber skirt board to keep material spillage to a minimum.
- The weigh conveyor shall have a lagged head pulley and self-cleaning, adjustable tail pulley and is driven by a 5hp x 1800-rpm motor.
- The conveyor shall have a 4" diameter, 35-degree troughing rollers on 4' centers and 4" diameter flat return rollers on 10' centers.
- A spring tensioned belt cleaner shall be mounted to the head pulley of the weigh conveyor.
- The drive shall have an open mesh belt guard for safety and ease of visual inspection.
- The weigh bridge assembly shall consist of a 75kg loadcell mounted to a heavy-duty idler.
- A gravity take-up with 12" diameter pulleys shall be provided for consistent belt tension and shall be located directly below the belt scale.
- A wind guard shall be mounted adjacent to the weighing span to minimize the influence that wind gusts may have on the weighing process.
- A speed sensor shall be mounted on the gravity take up pulley to provide derivative feedback to the blending system.

#### SCALPING SCREEN ASSEMBLY

- A 36" wide x 8' long single deck scalping screen shall be provided for rejecting oversized material. The screen deck shall be powered by a TEFC 2hp motor, or equivalent. The main screen shall be manufactured from heavy duty "H" beam construction.
- The screen cloth opening size shall be standard at 1.5" x 1.5".
- Removable vibrating mechanism with lubricated spherical roller bearings and integral dirt and grease seals on both sides of the bearings shall be provided.
- Side plates shall extend at the bottom to provide a clean transition to the belt conveyor below.
- Heavy-duty H beam construction shall integrate the coil spring supports, belt and counterweight guards, motor mount and shipping tie downs.
- Spring loaded snubbers shall ensure smooth start-up and shutdown as the vibrating frame passes through the spring's natural frequency.
- Bolt-in replaceable screen cloth panels shall be constructed from abrasive resistant tubular metal.
- Outer feed box shall have a bolt-in abrasive resistant AR plate line located in the bottom.

## STORAGE SILO

#### STATIONARY SILO

- The silo shall have a capacity of 100 tons based on material having a density of 120 lb./ft³.
- The double walled deck shall be continuously welded to the silo barrel. Eight inches of fiberglass insulation shall be installed within the deck section. The exterior surface shall be covered with 1/4" safety deck plate and the perimeter of the silo shall be surrounded with handrailing.
- A 6,000 lb. batching hopper will dual clam gates for maximum use of barrel volume while minimizing segregation.
- The diameter of the silo barrel shall be 11'-6" and the sidewalls shall be constructed with 1/4" thick steel plate, one hundred percent double welded.
- The silo barrel shall extend vertically down past the cone section to the base of the silo section to provide a protective skirt. 2" of insulation on the barrel shall overlap for effectiveness in eliminating cold spots. Insulation shall be covered with pre-painted aluminum skin banded for added rigidity.
- The silo cone shall be constructed with 3/8" steel and shall be continuously double welded to the barrel section. An AR cone liner shall be provided for long wear life.
- A 60-degree tapered slope to a 30" diameter discharge opening for maximum free flow of material.
- Hot oil, pressure tested, tubes shall be attached to the silo cone section to extend storage time. The hot oil system shall include inlet and outlet shutoff valves and a check valve on the inlet side. The tubes shall be overlaid with 4" of insulation, which, in turn, shall be embossed with a stucco finish.
- Dual clam gates shall provide rapid truck loading and segregation protection on discharge.
- Heavy "I"-beam legs are welded to the silo base and provide a 12' wide x 12' high drive through clearance.
- High & low-level indicators shall be provided which will activate alarms to alert the operator of a low or high condition.

#### STORAGE SURGE SYSTEM AIR SUPPLY

• 30 HP air compressor.

## DRAG CONVEYOR

- A 24" drag conveyor shall be constructed from heavy duty casing and shall have a capacity of 220tph. The drag shall be positioned at approximately 50 degrees of incline.
- The conveyor shall use a single 4" pitch heavy-duty roller chain.
- Drag flights shall be fabricated with 5/8" steel and shall be 6" high.
- The conveyor bottom shall be covered with  $\frac{1}{2}$ " thick AR400, or equivalent, liner and the sidewalls shall be fitted with 8" tall x 3/8" thick AR400, or equivalent, liners.
- The conveyor shall be driven by a 40hp motor through a shaft mounted gear reducer.
- The dray conveyor head shaft shall be made from 3-15/16" diameter 1144 cold rolled stress proof steel bar. The segmented heat-treated sprocket shall be bolted to a split hub. The sprocket shall be hardened to a 500 Brinell.
- The adjustable tail shaft shall be made from 3-7/16" diameter 1144 cold rolled stress proof steel.
- Hinged steel covers in 5' sections shall provide easy access to the conveyor for inspection and/or maintenance.
- A pneumatically actuated by-pass on the bottom of the drag conveyor shall be provided for diverting unwanted material on start-up or when cleaning out the drum.
- A platform shall be provided at the motor/gearbox level for ease of drive train maintenance. A full 360-degree platform shall be complete with hand railings and kick plate.
- A skid resistant stairway with hand railing shall be provided along one side of the drag conveyor. A caged ladder shall be provided to access the service platform form silo top.

## **ASPHALT TANK**

#### DIRECT FIRED ASPHALT TANK

- The 20,000-gallon horizontal tank shall be constructed with 1/4" thick shell and 5/16" thick flat flanged heads.
- 450,000 Btu/hr. #2 oil fired burner shall include all associated burner controls with lined fire tube.
- Tank shall be included with support saddles and mounted on a heavy "I"-beam skid.
- The tank shall be wrapped with 2" of insulation and shall be covered with a stucco aluminum cover.
- 3" diameter fill, vent, return and outlet pipes shall be provided as standard.
- The bottom of the tank shall be coiled with 294 lineal feet of 2" diameter schedule 40 pipe scavenger coils.
- A capped outlet connection shall be furnished for draining the tank.
- A 2-1/2" diameter dial type thermometer shall be provided for visual inspection of tank temperature.
- A float type mechanical level indicator shall be provided to indicate asphalt level inside of tank.

#### MULTI-FUEL BURNER

Natural gas and #2 fuel oil

#### ASPHALT TRANSFER PUMP

- Skid mounted jacketed pump.
- 200gpm, 15hp x 1800rpm motor.
- Controls and switchgear shall be mounted in a weatherproof enclosure near the pump.

#### FLEXIBLE HOSE PACKAGE

- 2" flexible hot oil jacketed hose, 12' long with quick disconnects.
- 3/4" flexible hot oil hose, 12' long.
- (4) <sup>3</sup>/<sub>4</sub>" flexible hot oil hoses 2' long.

#### AGITATOR READY

• Two (2) flanged and capped ports shall be provided for the ease of future addition of mechanical agitators.

Vendor will also be responsible for supplying and/or installing the following:

Hopper Scales

Fuel tank & connect a supply and return fuel line.

Asphalt lines and hot oil lines between tank and plant

All labor necessary for the erection and installation of equipment.

Supply and installation of foundations including anchor plates.

Electrical grounding as required.

Lighting equipment as required.

Scaffolding and electrical power, if required, for air testing.

All initial lubricants, heat transfer oil and hydraulic oil.

Certification of footings, installations, calibration of scales, as required.

Additional requirements to make equipment operable and not specifically mentioned in these specifications.

All freight from point of origin.

Vendor will furnish labor for the installation of the entire plant. This cost should be included in bid proposal.

Vendor shall be responsible for the labor and materials for conveying the equipment from the point of delivery to the site of installation and the placing of the equipment at point of erection and/or setting. The equipment shall be set and leveled by the vendor.

Pittsburg County will provide the following:

Electrical power to the M.C.C.

Electrical power to the asphalt tank.

Main regulator and gas connection to burner.

Receiving, unloading and storage of materials at job site.

PE review/stamping of drawings.

PE stamp on electrical drawings.

All building permits and approvals.

All construction and air permits and approvals.

Pittsburg County shall furnish at the site of the erection and/or setting, all equipment, fuel, water and electricity as required for stating the equipment.

Pittsburg County will be responsible for all dirt work on pad and all utility services provided to pad only.

County agrees to furnish equipment for the erection and/or setting of the equipment.